

Disclosed is a circuit and a method for driving a DC microwave oven. The circuit for driving a DC microwave oven according to the present invention includes: an inverting means to convert DC into AC by a driving pulse; a high voltage transformer to transform the AC from the inverting means, and supply the transformed AC to a magnetron; a pulse driving means to generate the driving pulse; and an over-current detecting means to detect an electric current which is supplied to the inverting means from a DC power source, and output an over-current detect signal if the detected current is determined as an over-current, so as to avoid the generation of the driving pulse by the pulse driving means. According to the present invention, the driving of the magnetron could be stopped when a malfunction of an interlock switch caused by an error or the over-current from the DC power source is detected, and circuit elements can be advantageously prevented from being damaged by the over-current.